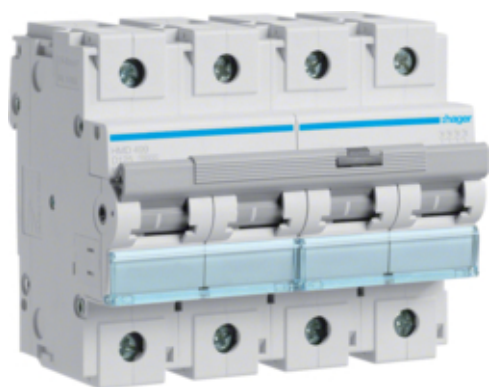




MCB 4P 15kA D-125A 6M

HMD499

#### Architecture

|                           |     |
|---------------------------|-----|
| Number of protected poles | 4   |
| Number of poles           | 4 P |
| Type of pole              | 4 P |
| Curve                     | D   |

#### Connectivity

|                                                 |                  |
|-------------------------------------------------|------------------|
| Bottom connection alignment for modular devices | Aligned terminal |
| Top connection alignment for modular devices    | Aligned terminal |

#### Main electrical features

|                                                                        |          |
|------------------------------------------------------------------------|----------|
| Frequency                                                              | 50/60 Hz |
| Rated short circuit breaking capacity $I_{cn}$ AC according IEC60898-1 | 15 kA    |
| Type of supply voltage                                                 | AC       |
| Rated operational voltage $U_e$                                        | 415 V    |

#### Voltage

|                                 |        |
|---------------------------------|--------|
| Rated insulation voltage        | 500 V  |
| Rated impulse withstand voltage | 6000 V |

#### Electric current

|                                                                                   |        |
|-----------------------------------------------------------------------------------|--------|
| Rated ultimate short-circuit breaking capacity $I_{cu}$ under 400V AC IEC 60947-2 | 15 kA  |
| Rated short circuit breaking capacity $I_{cn}$ under 230V AC according IEC60898-1 | 15 kA  |
| Rated short circuit breaking capacity $I_{cn}$ under 400V AC according IEC60898-1 | 15 kA  |
| Rated service breaking capacity $I_{cs}$ AC according IEC 60898-1                 | 7,5 kA |
| Rated service breaking capacity $I_{cs}$ AC according IEC 60947-2                 | 50 %   |
| Breaking capacity on 1 pole with 400 V NF 60947-2                                 | 4,5 kA |
| Breaking capacity on 1 pole with 415 V NF 60947-2                                 | 4,5 kA |
| Rated ultimate short-circuit breaking capacity $I_{cu}$ under 230V AC IEC 60947-2 | 15 kA  |
| Rated ultimate short-circuit breaking capacity $I_{cu}$ under 240V AC IEC 60947-2 | 15 kA  |

#### Technical Properties

|                                                                              |              |
|------------------------------------------------------------------------------|--------------|
| Rated ultimate short-circuit breaking capacity Icu under 415V AC IEC 60947-2 | 15 kA        |
| Magnetic regulating current at 40° C                                         | 10/20 In     |
| min/maxi threshold value of the AC thermal operation                         | 1,13/1,45 In |

#### Electric current / temperature

|                                              |         |
|----------------------------------------------|---------|
| Rating current 30°C                          | 125 A   |
| Rating current 35°C                          | 122 A   |
| Rating current 40°C                          | 119 A   |
| Rating current 45°C                          | 115,7 A |
| Rating current 50°C                          | 112 A   |
| Rating current 55°C                          | 109,1 A |
| Rating current 60°C                          | 105,6 A |
| Rating current 40°C according to IEC 60947-2 | 125 A   |
| Rating current 45°C according to IEC 60947-2 | 122 A   |
| Rating current 50°C according to IEC 60947-2 | 119 A   |
| Rating current 55°C according to IEC 60947-2 | 115,7 A |
| Rating current 60°C according to IEC 60947-2 | 112 A   |
| Rating current 65°C according to IEC 60947-2 | 109,1 A |
| Rating current 70°C according to IEC 60947-2 | 105,6 A |

#### Current correction factors

|                                                                             |      |
|-----------------------------------------------------------------------------|------|
| Correction factor of rating current for 2 devices placed side-by-side       | 1    |
| Correction factor of rating current for 3 devices placed side-by-side       | 0,95 |
| Correction factor of rating current for 4 and 5 devices placed side-by-side | 0,9  |
| Correction factor of rating current for 6 devices placed side-by-side       | 0,85 |

#### Power

|                           |         |
|---------------------------|---------|
| Power loss per pole at In | 11,56 W |
| Total power loss under IN | 42,25 W |

#### Endurance

|                                        |       |
|----------------------------------------|-------|
| Electric endurance in number of cycles | 4000  |
| Number of mechanical operations        | 20000 |

#### Dimensions

|                             |        |
|-----------------------------|--------|
| Depth of installed product  | 70 mm  |
| Height of installed product | 90 mm  |
| Width of installed product  | 106 mm |

#### Installation, mounting

|                                               |            |
|-----------------------------------------------|------------|
| Type of top connection for modular devices    | with screw |
| Tightening torque                             | 3,5 to 5Nm |
| Type of bottom rail clip for modular devices  | plastic    |
| Type of top rail clip for modular devices     | Plastic    |
| Type of Bottom Connection for modular devices | with screw |
| Bottom removability for modular devices       | yes        |
| Top removability for modular devices          | yes        |

#### Connection

|                                                                              |                                              |
|------------------------------------------------------------------------------|----------------------------------------------|
| Connection cross-section at output with screw, for flexible conductor        | 1/50 mm <sup>2</sup>                         |
| Connection cross-section of the access with screws, with flexible conductor  | 1/50 mm <sup>2</sup>                         |
| Connection cross-section at output with screw, for massive conductor         | 1/70 mm <sup>2</sup>                         |
| Connection cross-section for rigid conductor, upstream terminals with screws | 1/70 mm <sup>2</sup>                         |
| Connection cross-sect. rigid cable                                           | 70mm <sup>2</sup>                            |
| Connection cross-sect. flexible conductor                                    | 50mm <sup>2</sup>                            |
| Nominal tightening torque bottom terminal                                    | 3,6 Nm                                       |
| Nominal tightening torque top terminal                                       | 3,6 Nm                                       |
| Type of connection                                                           | terminal with tightening compensation system |

#### Standards

|                         |                         |
|-------------------------|-------------------------|
| Standard text           | EN 60898-1, IEC 60947-2 |
| European directive WEEE | concerned               |

#### Safety

|                     |      |
|---------------------|------|
| Protection index IP | IP20 |
|---------------------|------|

#### Use conditions

|                                                          |                  |
|----------------------------------------------------------|------------------|
| Degree of pollution according to IEC 60664 / IEC 60947-2 | 3                |
| Altitude                                                 | 2000 m           |
| Storage temperature                                      | -25 to 80 °C     |
| Air humidity protection                                  | for all climates |

#### temperatur

|                            |       |
|----------------------------|-------|
| Temperature of calibration | 30 °C |
|----------------------------|-------|